

REMARKS

Applicant has carefully reviewed the Office Action mailed February 21, 2007 and offers the following remarks to accompany the above amendments.

Claims 4-39 are pending in the present application. Claims 1-3 were previously cancelled.

Rejection under § 103(a) – Ditchburn et al. & Astle

Claims 4-6, 8-10, 12, 14-15, 17, 19-20, 22, 24-26, 28-29, 31-32, 34-35, and 37-38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,184,732 to Ditchburn, deceased, et al. (hereinafter “Ditchburn”) in view of U.S. Patent No. 4,698,682 to Astle (hereinafter “Astle”). Applicant respectfully traverses. For the Patent Office to combine references in an obviousness rejection, the Patent Office must establish *prima facie* obviousness by showing where each and every element is taught or suggested in the combined references. MPEP § 2143.03. If it cannot do so, the rejection must be withdrawn.

First before discussing the merits of this rejection, Applicant notes that independent claims 4, 8, 12, 17, 22, 26, 31, 34, and 37 have been amended to recite interpolating between adjacent frames of images captured from the arrays of cameras to create interpolated images and placing the interpolated images between the adjacent frames of images. Claims 32, 33, 35, 36, 38, and 39 have been amended for antecedent basis. These amendments are not made for reasons of patentability. The amendments are fully supported by the Specification. (See, e.g., paragraphs [0021], [0048], [0051], [0052], [0055], and [0065] in the publication of the present application). By these amendments, the claims currently presented do not interfere with claims of U.S. Patent No. 6,154,251

Also before discussing the merits of this rejection, Applicant provides a brief summary of the invention as currently claimed. The invention as currently claimed describes a system and method for creating special effects, namely the illusion that a single camera is moving around a common scene frozen in time. An array of cameras is deployed along preselected paths focused on the common scene to capture a still image of the scene from different perspectives. For example, the preselected path may be an arc or circle around the scene. The array of cameras is then triggered to record still images of the common scene substantially simultaneously. As presently claimed, interpolated images are provided between adjacent frames of the images captured from the array of cameras. In this manner, the images from the array of cameras can be

outputted in a time-sequence of frames in a motion picture medium. This gives a human viewer the appearance and illusion that a single camera has moved along the path of the array of cameras in which the scene appears frozen in time. For example, if the preselected path is a circle, the human viewer will see a time-sequenced image that appears as if a single camera has moved around the common scene frozen in time in the same preselected circle path.

Although the images from the array of cameras are outputted in a time sequence, the images are not time sequence images. The images are recorded substantially simultaneously (not in a sequence of times), and thus capture a frozen moment of the scene. In order to give the human viewer the illusion that a single camera is moving around the preselected path of the scene frozen in time, the substantially simultaneously recorded images are output in a time sequence. This is what gives the appearance that a single camera is moving on the preselected path of the still scene in time.

The Patent Office has stated in its Office Action mailed February 21, 2007 that Ditchburn does not anticipate the claimed invention. Ditchburn is far afield of the claimed invention. Applicant has previously pointed out numerous deficiencies in Ditchburn with respect to the claimed invention. Each of these deficiencies are incorporated herein (see for example, Applicant's responses to Office Actions mailed on November 3, 2006; April 24, 2006; and April 25, 2005). For example, Ditchburn does not employ cameras and is not directed at creating special effects in a motion picture medium whatsoever. Ditchburn is a shape sorting device that is used to identify shapes of objects, such as diamonds for example. (See col. 3, l. 64 – col. 4, l. 7). The viewers (5) disclosed in Ditchburn that record light of the object as it passes through the light curtain (3) are not cameras, but rather produce images representative of "edges of the object." (See Fig. 1; col. 3, ll. 47-49). Processing of the images is performed to distinguish the shape of the object. The images are not transferred into a time-sequence of frames nor outputted into a motion picture medium to create the illusion that a single camera has moved along the preselected path formed by the array of cameras. One of ordinary skill in the art would not look to Ditchburn as being related to or teaching the production of motion picture special effects.

The Patent Office points to Astle to remedy the deficiencies of Ditchburn. The Patent Office states that Ditchburn does not "disclose[s] the time-sequence of frames in a motion picture medium adapted to be viewable by a human." (Office Action mailed 2/21/2007, p. 3). However, the Patent Office states that "Astle teaches an apparatus that produces the illusion of

motion from a sequence of still images to be displayed depicting a moving scene.” (*Id.* at p. 4). The Patent Office either misinterprets Astle, or is misapplying the teachings of Astle to the claimed invention. Astle is simply providing for a motion picture to be produced from series of images recorded in the time domain or a time sequence and then put together on a motion picture medium in a time-sequence. Astle employs a single camera system. This is not what Applicant is claiming. Astle discloses traditional cinematography, wherein still images of a scene recorded in the time domain or time-sequence are then put together in another time-sequence and are shown at a sufficient frame rate to create the illusion of motion. Astle improves this traditional technology by providing a computer system for smoothing the transition between the sequence of images recorded in time domain to prevent jerkiness or flicker when dealing with moving images having larger pixel sizes. (See col. 1, ll. 42-48; col. 2, ll. 10-19). Unlike Astle, the claimed invention involves a series of still images recorded substantially simultaneously (i.e. not in a time sequence). Thus, the scene is recorded from multiple perspectives, but at the same or substantially the same moment in time. When these images are put into a time-sequence, the illusion of a single camera moving along the preselected path of the array of cameras showing a frozen image of the scene is created. Thus, the substantially simultaneously recorded images in the claimed invention are not time-sequenced like Astle, but are rather output in a time-sequence to create an illusion as if the images were recorded as a time-sequence of images. Thus, Astle does not remedy the deficiencies in Ditchburn and the obviousness rejection is improper and must be withdrawn.

In addition to the deficiencies stated above with respect to Ditchburn and Astle, neither reference teaches or suggests providing interpolated images between adjacent frames of the images captured from the array of cameras. This additional distinction is not necessary to overcome the rejection based on Ditchburn and Astle, but nevertheless is an additional reason why the Patent Office must withdraw the current rejection.

Rejection under § 103(a) –Ditchburn, Astle & Collender

Claims 7, 11, 13, 16, 18, 21, 23, 27, and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ditchburn in view of Astle, and in further view of U.S. Patent No. 3,815,979 to Collender (hereinafter “Collender”). Applicant respectfully traverses. The standards for *prima facie* obviousness are set forth above. Claims 7, 11, 13 and 16, 18 and 21,

23, and 27 and 30, depend, from claims independent claims 4, 8, 12, 17, 22, and 26, respectively. Accordingly, this rejection suffers from the same deficiencies in regard to Ditchburn and Astle. Collender does not remedy these deficiencies. Thus, the rejection of claims 7, 11, 13, 16, 18, 21, 23, 27, and 30 should be withdrawn. It is not necessary for Applicant to address the Patent Office's statements on Collender to overcome this rejection; however, Applicant reserves the right to provide additional arguments in this regard in the future if needed.

Rejection under § 103(a) – Astle, Ditchburn & Wilkinson et al.

Claims 33, 36, and 39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ditchburn in view of Astle, and further in view of U.S. Patent No. 4,453,182 to Wilkinson et al. (hereinafter “Wilkinson”). Applicant respectfully traverses. The standard for *prima facie* obviousness is set forth above.

Claims 33, 36, and 39 depend from independent claims 31, 34, and 37, respectively. Accordingly, this rejection suffers from the same deficiencies in regard to Ditchburn and Astle. Wilkinson does not remedy these deficiencies. Thus, the rejection of claims 33, 36, and 39 should be withdrawn. It is not necessary for Applicant to address the Patent Office's statements on Wilkinson to overcome this rejection; however, Applicant reserves the right to provide additional arguments in this regard in the future if needed.

The present application is now in condition for allowance and such action is respectfully requested. The Examiner is encouraged to contact Applicant's representative regarding any remaining issues in an effort to expedite allowance and issuance of the present application.

Respectfully submitted,

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Date: August 21, 2007
Attorney Docket: 3914-02A